

Fig. 1. Schematic diagram of methoxy mycolic acid synthase *mmaA* 4-*mmaA* 1 gene cluster of mycobacteria and location of forward A, and reverse D primers.

CTACTTCGCCAGCGTGAAC TGGTTGACGTCGATGTAGCCGACCCGGAACAGCTTGGCGCAGCC
GGTCAGGTATTTTCATGTACCGCTCGTAGACCTCTTCGGACTGGATCGCGATGGCCTCGCTTTTGTGTTT
CTGCAGCGCCTCGGCCACAGGTTCGAGGGTCTGGCGTAATGCGGCTGCAGCGACTGGCGGCGAGTCA
GCGTGAAACCCGTCTTCGCCGACTGTTCTCAACCATTTCAATCGTCGGAGGTTGGCCCCCGGGAAG
ATTTTCGGTCGCGATGAACTTGAGAAAGCGGGCCAGCCACAACGTGAGCGGCAAGCCGTGGTCGACCA
TCTGCTGCCTGGTCAGGCCGGTGATCGTGTGCAGCAGCAACACGCCATCGGGCGGCAGGATTTTGTGG
GCCCCGGGCAAGAAGTCGGCGTGACGATCGTGGCCGAAGTGCTCGAACGCGCCGATCGACACGATGC
GGTCGACGGGCTCGTTGAACTGCTCCATCCCCGCCAGCAACACTCGCCTGTCGCGCGGGGTGTCCATC
TCGTGGAACGACTTCTGCACATGGGCGGCCTGGTTCTTCGACAATGTCAGGCCGACGACGTTGACGTC
ATACTGCGCGATCGCGCGCCGCATGGTGGCGCCCCAGCCGCAACCGATATCGAGCAGCGTCATGCCGG
GCTGCAGACCTAGCTTGGCCAGCGCCAGGTTCGATCTTGGCGATCTGGGCCTCTTCCAGCGTCATGTCCT
CGCGTTCGAAATGCGCGCAGCTGTAGGTCTGGGTTCGATCCAGGAACAGCCGGAAGAAGTCGTCGGA
CAGGTCGTAGTGTGCCTGCACGTCCTCGAAGTGCGGCGTTAGGT*CTTGACCATgaggtgtaatgcctttccggaccct*
aggtggcctttcggcttgacggaacgcaccgatgctccccctcccgcatgctcgaggcatgctatccgatacagggccgcccactaaacgcgatcgaatttc
*ccaggtcagggacggatagagcgacgag*CTACTTGGTCATGGTGAAC TGGGCGACGTTGATTAGGCCTCTGCGGAA
GCGCTCCGCGCATCCGGTCAGATAGTGCATGAAGTTGTTGTAGACCTCTTCGGACTGTACGGCGATGG
CGCGTTCGCGGGCAGCCTGTAGGTTGGCGGCCCATGCATC*GAGAGTCCGTGCGTAGTGCTGCTGCAGCA*
GCTGGACATGCTCGATGGTGAAGCCCGCGGCCTGCGCATTGTCGACAATGTCGGGCTCCGATGGCAGC
TCGCCGCCCCGGAAGATCGACTCCCGCAGGAATTTGAGGAATCGAAGGTCGCTCATCGTCAGCGCAAT
GCCCTGTTTCGTGCAGCCACCTGCGGTTCGTAGGTGAACAGGCTGTGCAGTAGCATCCGCCCGTCATCGG
GCAGGATGTCGTAGGAGCGTTTGAAGAACGTCAGATACCGCTCCTTTTGAACGCGTCGAATGCCTCA
AAGCTGACGATCCGGTCGACGTTCTCTTCAAACCTCTTCCCAGCCCTGCAGCCGGGCCTCGGCGCGCCGT
TGCGTTCCGATTGCGGCCAGGCGGTCTTTGCTGCGTTCATAGTGATTCCGGCTGAGCGTGAGGCCGATG
ACATTGACGTCGTACTTCTCCACGGCCCCGAACGAGCGCCCCGCCCCACCCGCAACCCACGTCGAGTAG
CGTCATCCCCGGTTCGAGGTTGAGCTTGTCCAACGCCAGATCCACCTTGGCCAGTTGCGCCTCTTCCAG
CGTCATATCGTCACGCTCGAAATAGGCGCAGGTGTAGACCCAGGTGGGATCGAGGAACAACGCGAAG
AAGTCATCCGAAATGTCGTAAGCCGACTGTGACTCTTCGTAATATGGTCTCAGCTTGGCCAT

Fig. 2. Sequence of *mmaA2* and *mmaA1* gene with an intergenic region of 166 base pair (shown in lower case). Location of forward A, sequence ID 1 and reverse primer D, sequence ID 2. Both primer sequences are underlined and italicized.

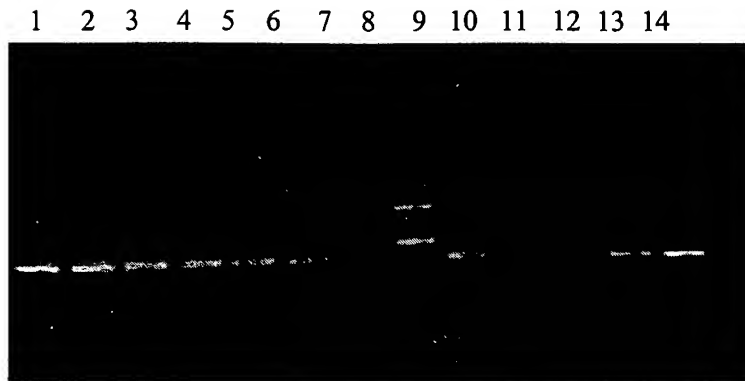


Fig. 3. PCR amplification of different mycobacterial genomic DNAs with primers A and D (lanes 1- 15): 1. *M.avium* 2. *M.bovis* 3. *M.chelonae* 4. *M.fortuitum* 5. *M.intracellulare* 6. *M.kansassi* 7. *M.phlei* 8. 100 bp DNA ladder 9. *M.marinum* 10. *M.scrofulaceum* 11. *M.smegmatis* 12. *M.szulgai*, 13. *M.tuberculosis* and 14. negative control. AD indicates 363 bp-amplified product.

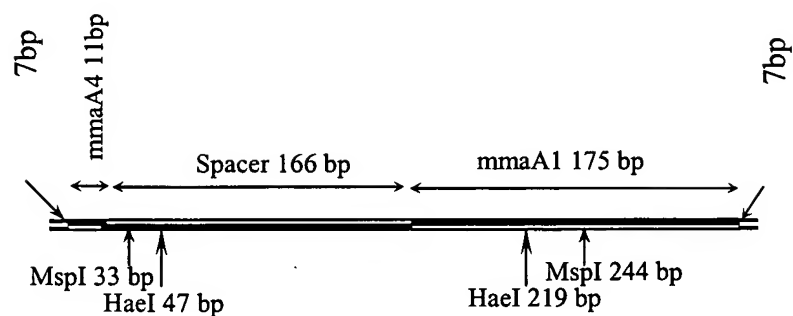


Fig. 4. Line diagram showing restriction endonuclease map of HaeI and MspI within AD.

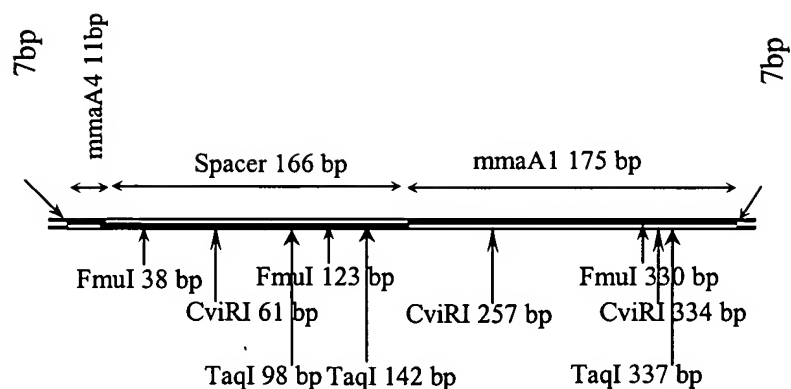


Fig. 5. Line diagram showing restriction endonuclease map of FmuI, CviRI and TaqI within AD.

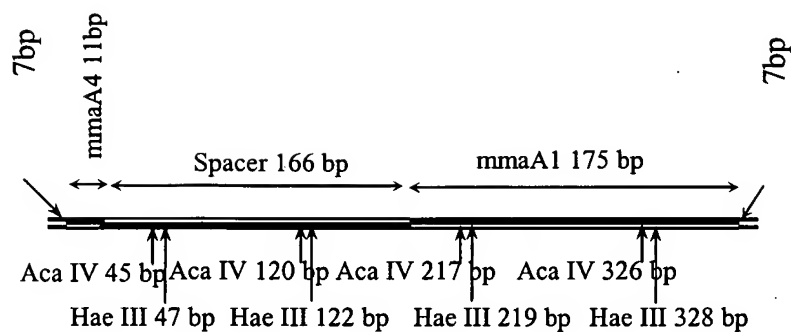


Fig. 6. Restriction map of AD showing distribution of the sites of restriction endonucleases AcaIV and HaeIII.

ARTICLE I

ARTICLE II

ARTICLE III

ARTICLE IV	Steps	Temp	Time	One
	Denaturation	94°C	3 min	
14cycles	Denaturation	94°C	45 sec	Touch Down Cycles
	Annealing	70°C (-0.8°C /cycle)	45 sec	
	Extension	72°C	1min	
25 cycles	Denaturation	94°C	45 sec	Normal PCR Cycles
	Annealing	58°C	45 sec	
	Extension	72°C	1min	

Fig. 7. Line diagram showing different steps of PCR reaction